

# Governor's STEM Advisory Council Regional STEM Network Hub Application

April 6, 2012

# **South Central Region**

Technology Association of Iowa with the Des Moines Area Community College

### Name of proposed requesting entity (or entries as partners):

Technology Association of Iowa (TAI), with Des Moines Area Community College (DMACC) as a collaborator

# Name and title of primary contact:

Leann Jacobson, President

#### **Primary contact address:**

500 E. Court Avenue, Suite 100

# Primary contact city/state/zip:

Des Moines, IA 50309

# Primary contact office telephone:

(515) 280-7700

# **Primary contact email address:**

leann@technologyiowa.org

#### Region:

South Central

#### **Proposed Location:**

Technology Association of Iowa (TAI) 500 E. Court Ave., Suite 100, Des Moines, Iowa

Easily accessible to I-235, TAI is located in the expanding East Village, on the edge of downtown Des Moines. This area of Des Moines is full of progressive and innovative businesses of all types. We are also just blocks west of the State Capitol. The state headquarters office of TAI houses all staff, with a boardroom seating 12 people comfortably. An adjacent parking lot is free for visitors and staff.

TAI submits this application in collaboration with Des Moines Area Community College (DMACC), which has its administrative offices and largest campus in Ankeny, just 20 minutes north of TAI's offices. This location would provide exceptional meeting and gathering spaces for forums and conferences of various sizes. DMACC/Ankeny is also easily accessible from I-35 and has free parking for visitors and staff.

In addition to its main Campus, DMACC has five additional campuses in Boone, Carroll, Newton, Urban/Des Moines, and West Des Moines, as well as several other learning centers and academies. This reach of facilities would offer additional connections and meeting space outside of the Des Moines area.

Note: The Technology Association of Iowa (TAI) is requesting designation as the South Central Regional STEM Network Hub, and as the organization to provide state-wide subject-matter expertise and support in the Technology sector.

# **Identify Your Mission:**

The mission of the Technology Association of Iowa (TAI) is in complete alignment with the goals of the Regional STEM Advisory Council for the Regional STEM Network Hubs.

TAI is the premier professional organization accelerating the success of lowa's technology industry and

tech-based economy. Our members include organizations of every size involved in virtually every aspect of technology creation, application, production and education in Iowa. We are Iowa's statewide voice for technology, the umbrella organization with 225 member companies and strong representation from business, academia, capital and government entities. Everything we do is to promote and grow technology in Iowa.

Technology is critical to innovation and we continually work directly with the state of Iowa's leadership on behalf of one of its targeted segments, Information Technology and Solutions. Iowa's tech sector fuels broad-based economic growth and is the foundation for the state's 21st Century economy.

The mission of TAI is to create and sustain a positive Technology environment for economic growth and job creation by enhancing access to talent and developing future workforce; creating connectivity with business, educational and government resources; and improving the business climate for Technology organizations.

Our top strategic priority is education/workforce. The TAI Board and its membership are 100% committed to supporting our work in this area. This priority is not new for TAI, but has been in place for six years as the TAI Board of Directors realized its need to be directly involved in finding solutions to overcome the workforce challenges and shortages they continually face. Board Members clearly understand that by collaboratively working together within TAI, rather than working individually, they can have a much greater impact on education.

HyperStream – the technology hub for Iowa's students

Over the past four years, our TAI Educational Foundation has developed, tested and launched HyperStream, a program that partners education and business. HyperStream Clubs have been established in both middle schools and high schools – grades 6 through 12. HyperStream combines both a career awareness initiative with hands-on, real-world tech projects that students choose and develop. We are very focused on the project-based learning approach that education is prominently promoting moving forward.

In just three years, we have developed 16 club partnerships in the larger metro areas of Des Moines, lowa City and Cedar Falls. Each of these clubs has a designated TAI member company(s) acting as its technology Ambassador/mentor team. TAI and our Ambassadors work in close synergy with the school's Superintendent, Principal and designated Teacher Champions(s) to ensure success at the school.

A total of 29 businesses have been involved in the development, funding and implementation of HyperStream to date. Please see end of this section for the complete list of companies.

Our work in developing HyperStream involved one year of research and testing prior to launch, in order to ensure we were successful in directing our messaging and positioning to our target audience – the students and teachers. We continually obtain the 'voice of the customer' by talking with students and teachers in the HyperStream program as we identify best practices and grow the program each year.

Our HyperStream career awareness message has three communications tiers:

- Technology is everywhere and involved in everything we do.
- Follow your passion technology plays a role in every industry.
- Technology myths we strive to overcome: it's not just for boys, you don't have to be a genius, it's not all offshored, and you're not just sitting in a cubicle all day staring at a computer.

The Clubs complete projects focused on business/product objectives, while utilizing a project team mentality. A sampling of projects include: text-messaging system for students/parents; teacher/student quiz Website for supporting learning; restaurant review Website; multi-media and video development; Website to promote school's Century 21 after school program, and others.

Club members have also implemented a wide range of community service projects as part of their efforts, sharing their knowledge of what they've learned with other audiences, such as elementary students, senior citizens, teacher groups, etc. Our Club members have had the opportunity to present their work in front of school boards, school administration, teacher groups and educational conferences, and at the TAI annual Awards Banquet (over 600 attending). The learning opportunities that these members have had extend far beyond the creation of their technology projects, and often include the soft skills necessary for being a productive and successful employee.

HyperStream has been very successful to date and those students who have gotten involved have provided both quantitative and anecdotal evidence of the benefits to the program. We have measurements in place to track career interest and active members in the Clubs. We have also implemented a longitudinal study with the active club members, in order to track if students in the program are going on to technology training at the post-secondary level. We have three goals as we track students over time:

- Is HyperStream making a difference to students relative to their career interests?
- Are students truly learning how to be technologists?
- Are students entering STEM programs at post-secondary institutions, and ultimately developing a career in the technology industry and/or STEM-related field?

In addition to our project-based learning approach for the HyperStream Clubs, TAI has been a founding partner of the IT-Adventures program for the past five years, developed by Iowa State University. There are over 35 schools registered for the competition this April. Tracking of students who participate in the IT-Adventures competition shows that 44% enter ISU for a STEM-related curriculum.

Just this year, we officially merged the two programs, and TAI now provides the funding and strategic support for its continued success. IT-Adventures is being rolled into HyperStream as another way for students to be involved with hands-on projects in the areas of robotics, game design and cyber security. ISU has developed curriculum for these three emphasis areas which helps teachers and technology professionals mentor the students. A statewide competition is held at ISU each April, which gives the students an opportunity to test their knowledge while enjoying a highly-energetic atmosphere of teams from across the state. We also plan on expanding the competition venues to include students interested in more free form Web, app or software development, and multi-media.

In 2010, TAI's Board of Directors recognized the initial success of HyperStream, and determined that to make a significant impact on the future availability of skilled workers, we would need to significantly scale the program across the state. It set as a strategic objective the goal to scale to 100 schools by 2014. This scale-up will ensure that we are reaching those students in the smaller, rural communities who don't have easy access to technology mentoring, as well as under-represented students across the state.

As we scale-up the program, we have identified our approach below: First, HyperStream will have two types of Club formats, both with access to technology professionals

with a diversity of subject matter expertise.

- Our Traditional HyperStream Clubs with Ambassador Teams on site at partner schools (typically this occurs in the larger metro areas where tech companies are located)
- HyperStream Clubs with access to a Virtual Network of Mentors, structured with TAI members as subject matter experts (typically in the rural communities)
- \* These Clubs may also receive periodic visits from tech mentors.
- \* TAI will manage a roster of tech professionals by subject matter expertise, willing to participate in the program.
- \* We will utilize a Web portal for on demand collaboration between students, teachers and mentors. A Chat Log protocol will be available with moderator, which will also provide us with rich dialogue on how the students are reacting to and thinking about STEM activities and specifically technology projects and careers.

And second, project-based learning will apply for all clubs, and students will continue to have the opportunity to choose how they participate between the following two options:

- Free form technology project completion students choose a product/service to create/develop and launch, i.e. web app, mobile app, multi-media tool, tracking tool, etc. These products/projects will solve a real-world challenge and be required to benefit either their school or community.
- IT Adventures/Ultimate Tech Challenge robotics, cyber defense, game design students will prepare all year culminating in April at the Ultimate Tech Challenge competition held at Iowa State University

Serving as a Regional STEM Network Hub would align perfectly with all three of TAI's strategic priorities – specifically enhancing education and future workforce; connecting people with resources and each other; and creating a nurturing environment for lowa technology and innovation. We already have the experience behind us in partnering business and education for a real-world learning environment, and bringing business in critical mass to the table.

What we've learned from our HyperStream best practices, combined with our statewide membership of lowa technologists, would position us well to serve as a regional leader for this statewide initiative.

Businesses have been involved in HyperStream

- Alliance Technologies
- Aviva
- Bit Method
- Dice
- DoExtra
- Far Reach Technologies
- Fiber Utilities
- FBL Financial Group
- Genova Technologies
- GeoLearning/Sum Total
- Global Reach Internet Productions
- Hy-Vee, Inc.
- IBM
- Integrated DNA Technologies
- Iowa Telecom/Windstream
- John Deere Intelligent Solutions Group
- Kingland Systems

- Microsoft
- On Point Strategies
- Paragon IT Professionals
- Pella Corporation
- Principal Financial Group
- R&R Realty Group
- QCI, Inc.
- Rockwell Collins
- Sogeti
- TeamQuest Corporation
- TEAM Technologies
- Zirous

# **Identify Support:**

TAI is positioned to serve as a Network Hub both financially and logistically. We understand that the Governor's STEM Advisory Council will provide 50% in funds towards financial support of the Hub Advocate. TAI is completely committed to providing a match of 50% for the Hub Advocate – an individual of the caliber necessary to provide the appropriate strategic vision, direction and implementation.

We look forward to welcoming the Regional Hub Advocate to our team and providing a stimulating and rewarding office environment. This Hub Advocate would be in addition to our staff person that manages our HyperStream program.

TAI is also committed to provide and waive costs for a variety of administrative and operational expenses. We anticipate waiving approximately \$25,000 in annual project expenses, including the following:

- Office space and furniture, laptop computer, network and email access, phone, office supplies, copies (\$6,000+)
- Meeting expenses, including lodging (\$3,000+)
- Misc. staff support, in addition to an Administrative Assistant which may be supplied through a central office of the STEM Council (\$3,000+)

DMACC as a collaborator will waive the following:

- Car and mileage expense (\$10,000+)
- Facility/meeting room expenses (\$3,000+)

TAI also waives any administrative fee in the management of this HUB.

With our network of technology experts, we would also be able to seek out the appropriate technical expertise for the benefit of the Regional Hubs, such as communications tools, Website, project management tools, etc.

#### **Participating Organizations:**

Upon review of the RFP's Recommended Regional Advisory Council make-up, we are closely aligned with this range of organizations on our own Board and with our HyperStream program. We believe it will be a streamlined process to set up this Advisory Council leveraging many of the existing relationships and connections we already have within TAI.

TAI would play an active role in assisting the Regional Advocate in creating, hosting and staffing the Advisory Council. We understand the importance and necessity of working with large spectrums of involved individuals and organizations, and have a successful track record in managing and maintaining strong relationships and communications with groups of this nature.

A key goal we would have is to maintain a healthy balance between business, education, and other influencer organizations on the Advisory Council. We strive for this on our own Board to ensure we are capturing the voice of all stakeholders involved in the technology landscape in lowa.

#### **Business**

We would want a strong representation of business on this Advisory Council, since they have the greatest understanding of what will be needed of workers over both the short-term and long-term. We want to ensure we have a range of businesses, both public and private, as well as small to large. Our membership is made up of businesses involved in the creation, application, production and education of technology. Many of our members also work in the other areas of STEM as well. Thus, we would ensure that we have representation across the different types of technology businesses, in addition to each area of STEM

Our current TAI Board consists of key industry thought-leaders and is represented by C-level executives from small and large companies from across the state, local and multinational, and both public and private sectors. (See below for complete roster.) We would seek involvement from our Board, as well as general members within the Hub area to ensure a strong cross-section of business involvement.

# **Education and Influencers**

Based on the RFP's required Regional Advisory Council make-up, we have existing relationships and connections with all groups on the list. Below is the roster of organizations, from the RFP and beyond, that we would consider for the Council, in addition to the business/industry representation mentioned above.

- Area Education Agency We are currently working with various AEA representatives on the scale-up of HyperStream, and are building synergies with their Administrators and Technology Consultants, specifically. We would look to the Heartland AEA for representation.
- Iowa State Extension Services/4-H We are currently working with Extension representatives on the scale-up of HyperStream, especially in the rural communities, with the goal of aligning with 4-H Clubs and their technology/STEM initiatives.
- FFA As with 4-H, FFA has statewide reach, especially in the rural communities, with their STEM initiatives.
- Girl Scouts We are very supportive of Girl Scouts and their STEM programming. They are an existing connection and would be a key player on the Advisory Council. Their headquarters is in Des Moines and would allow us to include their statewide leadership easily on the Council.
- Boy Scouts As with the Girl Scouts, we would develop synergies with the work they do in STEM programming.

- World Food Prize Youth Initiative We would identify synergies with their Youth programming, which addresses world problems and how technology is a tool that can assist in their work.
- K-12 students and parents We are currently tapped into this audience with our HyperStream program and would involve participating students and their parents on the Council. Parents can be a key motivator for their children to be involved in STEM curriculum, so it will be important that the parental audience is engaged.
- STEM teachers, Superintendents, Principals and school board members representing both urban and rural schools We have excellent relationships with this audience through our HyperStream program. See attached for testimonials from a variety of our Club's teacher champions.
- iJAG: lowa Jobs for America's Graduates We are currently working with iJAG staff on collaboration between our HyperStream Clubs and iJAG schools. They are reaching many disadvantaged and at risk students, which is a key audience for our HyperStream program. Further, they are in need of technology mentors across the state and have asked for our help. By working together, we will strengthen both programs. We plan to focus on combined efforts for launch in Fall, 2012.
- Des Moines Area Community College (DMACC) As noted above, DMACC is our key partner on this RFP. DMACC has been a long-term supporter of TAI and the HyperStream program. President Rob Denson serves on the TAI Board. The community college system has amazing STEM programs at the post-secondary level for students, whether obtaining a two-year degree, technology certificate, or transferring on to a university.
- Regional Universities: Grandview University, Drake University and Simpson College. We believe it is important to engage all higher learning institutions in this endeavor, and to ensure a cross-section of representatives from the various educational institutions in our region.
- Iowa State University ISU is an existing partner of TAI and the HyperStream program, as noted above. In 2012 we officially merged the IT-Adventures with HyperStream. The scale-up of HyperStream will include a close collaboration with Dr. Doug Jacobson and the IT-Adventures team.
- Alternative learning centers We would want to include a learning center, such as Spindustry Training, that works directly with students focused on STEM curriculum.
- Local library It would be important to have a representative of local libraries on this Council. These institutions are critical for lower-income families who do not have technology at home. Further, as libraries evolve in providing services for the 21st Century learners, technology will be more critical than ever for their continued success.
- Elected officials The TAI Board focuses on advocacy and works closely with key legislators in advancing legislation that is critical for our members' business success, which includes workforce and education. We believe it would be advantageous to include a key legislator or two on this Council.
- Iowa Economic Development Authority TAI currently works closely with the IEDA on one of the state's key targeted sectors Information Technology. We co-present and co-sponsor a variety of events throughout the year to support this work.

- Regional Workforce Development TAI has had a strong relationship with Iowa Workforce Development (the past Director served on TAI's Board). As the SC Hub includes Des Moines, we would seek high level participation on the council to impact not only our Hub, but Statewide STEM initiatives.
- Greater Des Moines Partnership We work closely with the GDMP (who is also a member of TAI) and share similar workforce and education initiatives. The GDMP has a strong voice in the region, now affiliated with more than 20 Chambers of Commerce surrounding the metro area. It's important that we work together to advance regional collaboration.
- Rural community Chamber of Commerce In addition to the GDMP, it will be important that we include several rural Chambers, to balance the voice of business between the metro and rural communities. Our members are involved with this group.
- Iowa Business Council We have an excellent relationship with the IBC's leadership, and most of its member organizations are also members of TAI. With the IBC made up of the largest employers in the state, they are on the front lines of needing large numbers of qualified workers. We will reach out to Elliott Smith, its Executive Director who is conveniently headquartered in Des Moines. It is critical that the IBC is engaged in this STEM movement, since they will benefit greatly from its success, have a significant impact on lowa's economic development, and have been an early and strong advocate for STEM education.
- Association of Business & Industry As with the IBC, this statewide organization has tremendous reach and its members are also challenged with finding qualified workers. Their representation on the Advisory Council would also benefit the STEM initiative, as well as their own members.

#### Statewide Technology Council:

We also propose that a representative from each of the Regional Councils serves on a statewide Technology Advisory Council that provides statewide services.

#### 2012 TAI Board of Directors

Gary Scholten, Executive Vice President and CIO – Principal Financial Group

Bruce Lehrman, President and CEO - Involta

Doug Gumm, IM Relationship Management Director – U.S., Pioneer Hi-Bred International

Christian Renaud, Founder – StartupCity Des Moines

Dawn Ainger, CEO - Genova Technologies

Wade Arnold, Co-Founder – T8 Webware

Darren Baty, Vice President of MIS – Hy-Vee

John-Paul Besong, Senior Vice President of e-Business and Lean

Electronics, Rockwell Collins

Michael Bird, President - Spindustry

Brad Brayton, Territory Manager – Iowa – IBM Corporation

Jeff Cash, Vice President & CIO – Mercy Medical Center

Rob Denson, President – Des Moines Area Community College

Wade Dewald, Sr. Vice President, Upper Midwest Unit – Sogeti USA

Scot Eberle, President - Fiberutilities Group

Tom Fischer, Senior Vice President and CIO - GuideOne

Jeff Frazee, CIO - Aviva

Dan Greteman, Senior Vice President & CIO – Allied, Commercial & Specialty – Nationwide

Joy Grosser, CIO – Iowa Health System

Irving Hahn, President - QCI

Wayne Hansen, President - CI3

Rick Hassman, Director of Corporate Applications – Pella Corporation

David Hensley, Executive Director - University of Iowa Pappajohn Entrepreneurial Center

R. Scott Johnson, Attorney – McKee, Voorhees & Sease, PLC

Paul Juffer, CPA and Partner – LWBJ Financial

Mark Kittrell, Partner – Prime Logic Partners

Ann Kovalchick, CIO – Drake University

Lisa Lorenzen, Executive Director – Iowa State University Research Foundation

Jim Masterson, CEO – LightEdge Solutions

Paul Melde, Vice President, Technology – Dice Holdings

Casey Niemann, Iowa & Nebraska Enterprise Team Manager – Microsoft

Sheldon Ohringer, CEO – Caleris

Steve Ovel, Executive Director, Government Relations – Kirkwood Community College

Brad Rasmussen, Director, Marketing/Sales Business Relationship – Wellmark

Cheryl Reardon, Assistant to the Vice President for Research – University of Iowa Centers for Enterprise

Michael Sadler, State Legislative Affairs Director – CenturyLink

Jeff Sauvageau, Vice President of Business Development – Sirius Computer Solutions

Greg Schmitz, President of Education – VGM Group

Don Schoen, CEO - BuyerCompass

Jeff Sparling, CEO – Vital Support Systems

Tony Thelen, Director, ISG Operations – John Deere

Craig Tjebben, Regional Manager - CISCO

Lorrie Tritch, COO – State of Iowa Department of Administrative Services

Aaron Warner, CIO – Integrated DNA Technologies

Ray Wasilewski, Vice President Information Technology – FBL Financial Group, Inc.

lacovos Zachariades, President and CEO – Global Reach Internet Productions

#### **Funding Assistance:**

Resource development may include financial support, technical expertise and tools, relationship building, and advocacy. We understand the importance of sustainability over time for this important initiative.

Our TAI Board of Directors and Executive Committee have readily agreed to a shared commitment with the Governor's STEM Council and will support this engagement by making sure the Regional Network Hub is extremely successful across all of these types of resource development. We are excited to serve as the Regional Network Hub and believe we are best positioned to do so. Further, our member companies will greatly benefit from this initiative and they believe they are responsible to be involved in its implementation.

We are very comfortable in being part of the supervision team for the Hub Advocate, and look forward to having that individual as part of our TAI family. As noted above we are 100% committed to sharing the funding for the staff position.

Our Board includes the largest employers in the state, as well as highly successful entrepreneurs, and they have continually stepped up to the plate with financial assistance that is necessary and in alignment with our mission for the technology industry. Just one example is the matching dollars TAI companies

provided along with the State of Iowa for the development of HyperStream. HyperStream is now fully funded by TAI's Educational Foundation. Technology is a prime cheerleader for the STEM movement and we assure 100% engagement as a leader of the South Central STEM Network Hub.

We are also in the best position to seek out technical expertise for technology/communications resources for the effective productivity of all Regional Hub Advocates and the STEM Council at large.

We currently place an emphasis on advocacy for technology innovation in the state, including STEM educational initiatives. We are already positioned to leverage this advocacy on behalf of the technology sector.

Resource development for the Regional STEM Network Hub would not conflict with TAI's regular activities. In fact, we view this opportunity to be an extension of our mission – an initiative that has vast benefits for the state at large and its economic growth, and equally our members. We would take this role of resource development very seriously. In fact, we believe our direct involvement would more than likely enhance the opportunities of resource development and funding within our sector for the STEM initiative.

# **Additional Information:**

#### We Own a Letter in STEM

Everything we have read in the RFP is consistent with our organization's mission. We are an established and recognized organization serving as the voice of technology for the state. We are proud of the fact that TAI owns one of the letters in STEM — and we are the only organization in lowa that can say that about STEM. We take our responsibility for this very seriously.

Many of our members have told us that "technology is usually not a focus within the STEM movement and it needs to be." Doug Jacobson at ISU (see attached letter of recommendation) has also told us that "T" is often overlooked in the STEM movement. While technology tools are being built for the average consumer, our industry is directly impacting every aspect of society on a daily basis. This can't always be said for the other letters in STEM. Our direct involvement as a Regional Hub would serve the Governor's Council and ALL regions well.

# **Subject Matter Experts**

We are the subject matter experts in technology (more below) and would have direct access to the key technology thought leaders and strategists throughout the entire state.

We have strong relationships with our peer member associations in other states, including our neighboring state of Minnesota. We continually share best practices and ideas to benefit our member companies. HyperStream is a leading model across the country. In turn, the Minnesota High Tech Association has developed a program, getSTEM™. We are in conversation with the Minnesota association as we explore developing a similar tool to support the scale-up of HyperStream. getSTEM is a web portal designed to connect Minnesota educators with science and technology businesses, in order to better prepare students for post-secondary education programs and careers in science, technology, engineering, and math (STEM). Teachers may use the website to create postings to ASK for community assistance in having materials donated to their classroom, guest presentations, volunteers for field trips and much more. Local businesses use the website to OFFER their K-12 outreach programs that teachers may incorporate into their classroom.

## **Collaborating with DMACC**

Collaborating with DMACC would model the HyperStream program — building successful partnerships between business and education. DMACC has been a leader in developing curriculum in partnership with businesses and corporations, such as the John Deere Team Scholars Integrated Manufacturing Technology program, Accu-Mold Scholars, Vermeer Welder Development, Customized training though DMACC Business Resources and the fact that each program has an advisory committee of the businesses who hire students from the program, telling the program what competencies are needed in the workplace. DMACC also coordinates a number of Career Academies and offers college-level courses to thousands of high school students each year.

Their extensive outreach in working with the business and grassroots communities would be instrumental in our implementation of the Regional Hub.

#### **Subject Matter Expertise:**

We are lowa's subject matter experts in technology and would have direct access to the technology thought leaders and stakeholders throughout the state. As noted above, our Board is made up of companies of all sizes. We know who to contact and connect with to get things done.

With our statewide reach, we are positioned to assist all Regional Hubs with connections to technology experts.

lowa is a jewel with its abundance of technology successes -- companies who have pioneered a range of innovations and products. TAI presents a range of special events throughout the year, which allows us to know about the continually emerging innovators and innovations among lowa companies and educational institutions. Through award nominations and applications, we continually see the "Who's Who in lowa technology" and STEM involvement:

- Women of Innovation (WOI) The Iowa Women of Innovation is an awards presentation that elevates and celebrates today's extraordinary women in STEM. The event recognizes women who are leaders in science, technology, engineering or math. Students at both the secondary (grades 7-12) and college levels are also recognized.
- DigiGirlz As part of Women of Innovation, TAI has partnered with Microsoft the past two years by presenting its DigiGirlz program to Iowa 8th-12th grade females in a half-day session. They are then invited to attend the WOI Awards Banquet in the evening. Young females get to hear from key Microsoft thought leaders and female mentors about the company's exploration into emerging technologies.
- Prometheus Awards and Banquet The Prometheus Awards have been established as lowa's largest and most prestigious distinction dedicated to recognizing and celebrating the innovation and brilliance of lowa's high-tech industry. This ceremony honors both companies and individuals who have demonstrated outstanding leadership and excellence in technology.
- Pitch & Grow Entrepreneurs pitch their business to a supportive group of peer CEOs, ClOs, business development experts, industry professionals and business-savvy people. In return, they have a unique opportunity to receive constructive feedback on areas such as fundraising, value proposition, business plan, management team, sales/marketing/support and building strategy.

• i2iowa – The preeminent investor conference in Iowa sponsored by the Iowa Economic Development Authority and presented by TAI. This forum connects investors with a portfolio of Iowa companies in four tracks: Life and Bio Sciences; Information Technology; Advanced Manufacturing; and General Business.

#### **DMACC**

Most jobs in the future will require education beyond high school. We are excited about our partnership with DMACC on this proposal. DMACC is a true leader in community college education and is well positioned to partner on this initiative. With its curriculum in Information Technology throughout the DMACC system and founding of the statewide Electronic Crime Institute on its Ankeny campus, we would benefit greatly from their educational best practices.

Specifically, on each of its six campus sites DMACC offers Arts and Science and technical education two-year degrees. Its Technology programs and certificates will equip students with the technology and knowledge one needs to succeed in the ever-changing workplace, while the Arts and Science (AA and AS) degrees prepare students for transfer to the four-year institution of their choice. EACH Campus is designed to be a "live" learning environment where new and emerging technologies are tested and taught side-by-side and integrated into the academic path one chooses.

DMACC will reach out to the other Iowa Community Colleges and public and private colleges and universities, most of which have articulation agreements with DMACC, to help coordinate any education or training components of the HUB work that may be statewide in application.

#### **Additional Considerations:**

One of the goals of the Regional STEM network is to "foster the involvement of businesses in the region to help advance STEM education." We just can't emphasize enough the key role we would play in bringing business to the table for this STEM initiative – for ALL regions.

As noted above, our HyperStream program was created to advance STEM education in the state of lowa, by fostering real-world interaction and project-based learning between business and education. It is critical for the success of our members, who are located across the state.

Further, we are already a leader in the STEM education movement in Iowa with our HyperStream program and our Educational Foundation. We have a great handle on how students are reacting to technology careers through our Club's measurement and tracking procedures.

The Regional Hub Advocate would have easy access to the business leaders in Iowa technology, and would have 100-percent support from our Board and membership.

Technologists are natural collaborators and our relationship with DMACC indicates our philosophy in working together, not in isolation, on such important initiatives.

With our statewide reach and existing STEM education program, we would be in a great position to lead the South Central region, and we would be positioned seamlessly for cross-collaboration and networking with the other five regions.

Testimonials from Administrators, Teachers, Students & Technology Ambassadors

#### Students

- "HyperStream provided me an opportunity to explore my interests in business and technology. HyperStream rocks!" William – Junior/Lincoln High School
- "Hyperstream was a great experience; it was fun and I learned all kinds of new things, as well as improved skills I already had. I was able to see more of the process that went into developing and marketing a product (Skloop, our twitter-based mobile school messaging system). Throughout high school, I've been bouncing back-and-forth between career choices. As I got involved with HyperStream, I've settled on graphic design and basic online coding. My goals are to learn more about programming and video games, then use graphic design in games or in fashion." Emily, Senior/Waukee High School
- "I like HyperStream because it gives you a chance to show leadership for your team and an opportunity to get to know people." Valeria Senior/Lincoln High School

#### **Administrators and Teachers**

- "Literally every job that exists today requires the use of or access to technology in some form or another. Helping students understand the impact of technology on their futures and the workforce that they will be entering is critical in preparing them for life beyond high school. We believe it is extremely beneficial to our students and staff to be involved in this program!"

  Dave Wilkerson, Ph.D., Superintendent, Waukee Schools
- Hy-Vee's corporate office and TAI approached Urbandale High School a few years ago about a unique opportunity to partner with them. Their goal was simple--get students excited about technology and exploring their interests in technology related fields. With this goal being aligned so well with part of our focus in education, we welcomed them into our school. Since then, we've seen our Hyperstream club grow and our club members really begin to heighten their knowledge and interest in computers and technology. We are appreciative of Hy-Vee and TAI for bringing Hyperstream to UHS! Tim Carver, Assistant Principal, Urbandale High School
- "HyperStream is a fantastic, authentic program for students to gain experience with real-world applications. The mentoring and learning that happens in this Club doesn't happen in most classrooms. Seeing their efforts put into action is rewarding and a learning experience they wouldn't get to experience otherwise. It is definitely something the HyperStream students can be proud of and place on their resume."

Michelle Hill, Educator, Waukee High School

- "Professionals working with your students. Doesn't get any better than that. Unless you have a web developer, network engineer, computer game designer, etc. in your building."

  Jeremiah Lehr, Technology Coordinator, Dike-New Hartford High School
- "I'm extremely supportive of technology and its diverse uses in the classroom. When I found out that a major Des Moines employer would be partnered with us, it seemed like something that would be so beneficial to kids...to see what technology looks like in the real world...that I had to jump at it! We are working at establishing HyperStream on a deeper level. It's really working well with the kids. They are building their own LHS DECA website and learning that it is not just sitting and coding all day long."

  Janet Kinman, Educator, Roosevelt High School, Des Moines
- "I like the idea of people from "real jobs" coming and working with students students learn and

adults learn more about the educational needs in our district." Tracy Peterson, Educator, Clear Lake Middle School Technology Ambassadors

Art Senn, Information Technology Security Analyst, Hy-vee Inc.

• "I believe it's VERY important to get students involved in technology. We need to spark their imaginations early so they have time to find the information and gain the knowledge necessary that will lead them to become our future researchers, explorers, space craft engineers or even another Steve Jobs or Bill Gates. Hy-Vee's sponsorship makes it possible for the students to do things they otherwise might not be able to do. For example, working with real servers and network equipment or sending Information Technology Professionals to provide real world technical knowledge and act as mentors. If we want lowa and the United States to keep our position in the world economy, then we need companies like Hy-Vee Inc. and schools like Urbandale High School to continue to pick up the torch and pass it on to the next generation of students."

https://docs.google.com/document/d/186om1aOU9fSyxYhqanmGJK3n7AMe2w1aYxPD4FNkxgM/edit